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Sequence Listing could not be accepted due to errors.
See attached Validation Report.
If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).
Reviewer: Keisha Douglas
Timestamp: [year=2010; month=11; day=3; hr=10; min=53; sec=1; ms=998;]

==========

****

Reviewer Comments:

<210> 1

<211> 7

<212> PRT

<213> Gymnea sylvestre

<400> 1

Asn Gly Ser Phe Ser Gly Phe

1 5

The above sequence id# 1 is invalid, please delete spacing betweeen the amino acids and the numbering. This error is seen globally throughout the sequences.

****

Validated By CRFValidator v 1.0.3

Application No: 10579655 Version No: 4.0

Input Set:

Output Set:

Started: 2010-10-25 19:40:21.780
Finished: 2010-10-25 19:40:36.460
Elapsed: 0 hr(s) 0 min(s) 14 sec(s) 680 ms
Total Warnings: 379
Total Errors: 2984
No. of SeqIDs Defined: 415
Actual SeqID Count: 415

Error code		Error Description
W	402	Undefined organism found in <213> in SEQ ID (1)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (1)
W	402	Undefined organism found in <213> in SEQ ID (2)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (2)
W	402	Undefined organism found in <213> in SEQ ID (3)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (3)
W	402	Undefined organism found in <213> in SEQ ID (4)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (4)
W	213	Artificial or Unknown found in <213> in SEQ ID (5)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (5)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (5)
W	213	Artificial or Unknown found in <213> in SEQ ID (6)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (6)

Input Set:

Output Set:

Started: 2010-10-25 19:40:21.780
Finished: 2010-10-25 19:40:36.460
Elapsed: 0 hr(s) 0 min(s) 14 sec(s) 680 ms
Total Warnings: 379
Total Errors: 2984
No. of SeqIDs Defined: 415
Actual SeqID Count: 415

Error code	Error Description
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (7)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (8)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (8)
W 402	Undefined organism found in <213> in SEQ ID (9)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (9)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (9)
W 402	Undefined organism found in <213> in SEQ ID (10)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (10)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (10)

Input Set:

Output Set:

Started: 2010-10-25 19:40:21.780
Finished: 2010-10-25 19:40:36.460
Elapsed: 0 hr(s) 0 min(s) 14 sec(s) 680 ms
Total Warnings: 379
Total Errors: 2984
No. of SeqIDs Defined: 415
Actual SeqID Count: 415

Error code		Error Description
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E	321	No. of Bases conflict, this line has no nucleotides SEQID (11)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (11)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (11)
W	402	Undefined organism found in <213> in SEQ ID (12)
E	355	Empty lines found between the amino acid numbering and the proteins
E	321	No. of Bases conflict, this line has no nucleotides SEQID (12) POS (0)
W	402	Undefined organism found in <213> in SEQ ID (13)
W	402	Undefined organism found in <213> in SEQ ID (14)
W	402	Undefined organism found in <213> in SEQ ID (15)
W	402	Undefined organism found in <213> in SEQ ID (16)
W	402	Undefined organism found in <213> in SEQ ID (17)
W	213	Artificial or Unknown found in <213> in SEQ ID (18)
W	213	Artificial or Unknown found in <213> in SEQ ID (19)
W	213	Artificial or Unknown found in <213> in SEQ ID (20)
W	213	Artificial or Unknown found in <213> in SEQ ID (21)
W	213	Artificial or Unknown found in <213> in SEQ ID (22)
W	402	Undefined organism found in <213> in SEQ ID (23)

Input Set:

Output Set:

Started: 2010-10-25 19:40:21.780
Finished: 2010-10-25 19:40:36.460
Elapsed: 0 hr(s) 0 min(s) 14 sec(s) 680 ms
Total Warnings: 379
Total Errors: 2984
No. of SeqIDs Defined: 415
Actual SeqID Count: 415

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (24)
W 402	Undefined organism found in <213> in SEQ ID (25)
W 402	Undefined organism found in <213> in SEQ ID (26)
W 402	Undefined organism found in <213> in SEQ ID (28)
W 402	Undefined organism found in <213> in SEQ ID (29)
W 402	Undefined organism found in <213> in SEQ ID (30)
	This error has occured more than 20 times, will not be displayed
W 213	Artificial or Unknown found in <213> in SEQ ID (77)
W 213	Artificial or Unknown found in <213> in SEQ ID (78)
W 213	Artificial or Unknown found in <213> in SEQ ID (79)
W 213	Artificial or Unknown found in <213> in SEQ ID (80)
W 213	Artificial or Unknown found in <213> in SEQ ID (253)
W 213	Artificial or Unknown found in <213> in SEQ ID (254)
W 213	Artificial or Unknown found in <213> in SEQ ID (255)
W 213	Artificial or Unknown found in <213> in SEQ ID (256)
W 213	Artificial or Unknown found in <213> in SEQ ID (257)
W 213	Artificial or Unknown found in <213> in SEQ ID (258)
W 213	Artificial or Unknown found in <213> in SEQ ID (259)
	This error has occured more than 20 times, will not be displayed

SEQUENCE LISTING

<110> Sanofi Pasteur, Inc.

<120> METHODS FOR PURIFYING PERTUSSIS TOXIN AND PEPTIDES USEFUL THEREFOR

<130> API-03-15

<140> 10579655
<141> 2010-10-25

<150> 60/523,881

<151> 2003-11-20

<150> PCT/US2004/038700

<151> 2004-11-18

<160> 415

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<211> 7

<212> PRT

<213> Gymnea sylvestre

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<212> PRT

<213> Gymnea sylvestre

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<210> 3

<211> 7

<212> PRT

<213> Gymnea sylvestre

<400> 3

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<212> PRT

<213> Gymnea sylvestre

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Asn Met Arg Ile Glu Thr Pro Asn Asn Ile Arg Lys Asp Ala

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<210> 7

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<210> 9

<211> 34

<212> PRT

<213> Gymnea sylvestre

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1 5 10 15

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Cys Gly

<210> 10

<211> 34

<212> PRT

<213> Gymnea sylvestre

<400> 10

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Cys Gly

<210> 11

<211> 35

<212> PRT

<213> Gymnea sylvestre

<400> 11

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20 25 30

Cys Gly Ser

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<210> 12

<211> 34

<212> PRT

<213> Gymnea sylvestre

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20 25 30

Cys Gly

<210> 13

<211> 35

<212> PRT

<213> Gymnea sylvestre

<400> 13

Gln Gln Cys Val Lys Lys Asp Glu Leu Cys Ile Pro Tyr Tyr Leu Asp

1 5 10 15

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35

<210> 14

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<213> Gymnea sylvestre

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agcggcagtt ctgggtctag c 141

<210> 16

<211> 84

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<213> Gymnea sylvestre

<400> 16

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catagtggct caagctcagg atca 84

<210> 17

<211> 44

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<213> Gymnea sylvestre

<400> 17

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20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Ala Asn Ala Pro
35 40 45

Lys Ala Ser Ala Ile
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<211> 6

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His His His His His His

1 5

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<210> 22

<211> 127

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<220>

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atgatga 127

<210> 23

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<212> DNA

<213> Gymnea sylvestre

<400> 23

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catcatcatc atgctagatc t 81

<210> 24

<211> 32

<212> DNA

<213> Gymnea sylvestre

<400> 24

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<212> DNA

<213> Bacteriophage M13

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<211> 54

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<213> Gymnea sylvestre

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1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Gly Ser Val Gly His Cys Cys Glu

20 25 30

Pro Leu Glu Cys Leu Arg Arg Phe Leu Asn Leu Arg Trp Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

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<210> 27

<211> 54

<212> PRT

<213> Gymnema sylvestre

<400> 27

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1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ile Val Met Arg Ala Pro Cys Cys Glu

20 25 30

Pro Leu Glu Cys Leu Arg Arg Tyr Met Leu Lys His Met Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

50

<210> 28

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 28

Met His His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys

1 5 10 15

Val Lys Lys Asp Glu Leu Cys Lys Ala Phe Arg Tyr Ser Cys Cys Glu

20 25 30

Pro Leu Glu Cys Leu Arg Lys Trp Leu Lys Ala Arg Phe Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

50

<210> 29

<211> 54

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<213> Gymnea sylvestre

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Met His His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys

1 5 10 15

Val Lys Lys Asp Glu Leu Cys Leu Arg Ser Ser Ile Asp Cys Cys Glu

20 25 30

Pro Leu Glu Cys Leu Tyr Lys Trp Met Gln Arg Arg Leu Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

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<210> 30

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<213> Gymnea sylvestre

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1 5 10 15

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20 25 30

Pro Leu Glu Cys Leu Leu Glu Met Leu Glu Arg Lys Arg Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

50

<210> 31

<211> 53

<212> PRT

<213> Gymnea sylvestre

<400> 31

Met His His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys

1 5 10 15

Val Lys Lys Asp Glu Leu Cys Met Ser Met Ala Cys Val Cys Cys Glu

20 25 30

Pro Leu Glu Cys Lys Tyr His Gly Tyr Phe Trp Leu Cys Gly Ser Gly

35 40 45

Ser Ser Gly Ser Ser

50

<210> 32

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 32

Met His His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys

1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Val Trp Phe Asp Val Cys Cys Glu

20 25 30

Pro Leu Glu Cys Thr Tyr Gln Ser Gly Tyr Tyr Trp Leu Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

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<210> 33

<211> 54

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<213> Gymnea sylvestre

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Met His His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys

1 5 10 15

Val Lys Lys Asp Glu Leu Cys Glu Pro Trp Tyr Trp Arg Cys Cys Glu

20 25 30

Pro Leu Glu Cys Val Tyr Thr Ser Gly Tyr Tyr Tyr Ser Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

50

<210> 34

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 34

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1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Arg Trp Asp Leu Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Ile Tyr Thr Ser Glu Leu Tyr Ala Thr Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
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<213> Gymnea sylvestre

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1 5 10 15

Val Lys Lys Asp Glu Leu Cys Val Phe Tyr Phe Pro Asn Cys Cys Glu
20 25 30

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35 40 45

Gly Ser Ser Gly Ser Ser
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<211> 53

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<213> Gymnea sylvestre

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1 5 10 15

Val Lys Lys Asp Glu Leu Cys Met Ser Met Ala Cys Val Cys Cys Glu

20 25 30

Pro Leu Glu Cys Lys Tyr His Gly Tyr Phe Trp Leu Cys Gly Ser Gly

35 40 45

Ser Ser Gly Ser Ser

50

<210> 37

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 37

Met His His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys

1 5 10 15

Val Lys Lys Asp Glu Leu Cys Thr Thr Ala Ser Lys Ser Cys Cys Glu

20 25 30

Pro Leu Glu Cys Lys Trp Thr Asn Glu His Phe Gly Thr Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

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<210> 38

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 38

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Val Lys Lys Asp Glu Leu Cys Ser Gln Ser Val Pro Met Cys Cys Glu

20 25 30

Pro Leu Glu Cys Lys Trp Phe Asn Glu Asn Tyr Gly Ile Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

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<210> 39

<211> 54

<212> PRT

<213> Gymnea sylvestre

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Met His His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys

1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Arg Trp Asp Leu Val Cys Cys Glu

20 25 30

Pro Leu Glu Cys Ile Tyr Thr Ser Glu Leu Tyr Ala Thr Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

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<210> 40

<211> 54

<212> PRT

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1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Arg Trp Asp Leu Val Cys Cys Glu

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Pro Leu Glu Cys Leu Gly His Gly Leu Gly Tyr Ala Tyr Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

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<210> 41

<211> 53

<212> PRT

<213> Gymnea sylvestre

<400> 41

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1 5 10 15

Val Lys Lys Asp Glu Leu Cys Met Trp Ser Arg Glu Val Cys Cys Glu

20 25 30

Pro Leu Glu Cys Tyr Tyr Thr Gly Trp Tyr Trp Ala Cys Gly Ser Gly

35 40 45

Ser Ser Gly Ser Ser

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<210> 42

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 42

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1 5 10 15

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20 25 30

Pro Leu Glu Cys Phe Gln Met Gly His Gly Phe Lys Arg Cys Gly Ser

35 40 45

Gly Ser Ser Gly Ser Ser

50

<210> 43

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